

Claim 31 (Previously Presented): The method as recited in claim 30 wherein the satellite system includes a global positioning system.

Claim 33 (Previously Presented): The method as recited in claim 25 wherein each of the measuring computers includes a respective local clock continuously synchronized to a respective local GPS receiver via a network time protocol so as to provide a respective internally synchronized local clock.

Claim 34 (Previously Presented): The method as recited in claim 33 wherein a fourth of the plurality of first time sources includes signals of a satellite system, and the third time source includes the internally synchronized local clock of the first measuring computer, the third time source having a next highest accuracy relative to the fourth time source.

Claim 39 (Previously Presented): The method as recited in claim 25 further comprising synchronizing a first local clock of the first measuring computer via a network time protocol and storing a type and an accuracy of the synchronizing.

Claim 40 (Previously Presented): The method as recited in claim 25 wherein the first measuring computer includes a first local clock, the first time source including the first local clock, the first local clock being unsynchronized, the unsynchronized first local clock having a fourth highest accuracy relative to other time sources of the plurality of first time sources.

Claim 41 (Canceled)

Claim 42 (Currently Amended): The method as recited in claim 41 25 wherein the measurement packets include user datagram protocol packets.

Claim 43 (Currently Amended): The method as recited in claim 41 25 wherein the first measuring computer acts as a sender and the second measuring computer acts as a receiver.

Claim 44 (Currently Amended): The method as recited in claim 41 25 further comprising, using the first measuring computer:

recording the first time stamp, the first time stamp being a send time stamp of an outgoing measurement packet;
~~generating first data associated with the send time stamp; and~~
transmitting the first data to the second measuring computer with the an outgoing measurement packet.

Claim 45 (Currently Amended): The method as recited in claim 44 ~~25~~ further comprising transmitting a sequence number to the second measuring computer with the an outgoing measurement packet.

Claim 46 (Previously Presented): The method as recited in claim 44 wherein the first data relates to information about at least one of the third time source, a type of synchronization, an accuracy of the synchronization, and an accuracy of the send time stamp.

Claim 47 (Currently Amended): The method as recited in claim 44 further comprising generating, with the second measuring computer, a the receive time stamp, the receive time stamp being a time stamp of an incoming measurement packet ~~and second data associated with the receive time stamp.~~

Claim 48 (Previously Presented): The method as recited in claim 47 wherein the data associated with the receive time stamp relates to information about at least one of the third time source, a type of synchronization, an accuracy of the synchronization, and an accuracy of the receive time stamp.

Claim 49 (Canceled)

Claim 50 (Canceled)

Claim 51 (Currently Amended): The method as recited in claim 4125 further comprising:

~~generating first data associated with the first time stamp, the first time stamp being a send time stamp;~~

—generating second data associated with a receive time stamp; and
determining a measurement result from the first and second data.

Claim 52 (Currently Amended): The method as recited in claim 25 further comprising providing a plurality of second time sources associated with a second measuring computer of the plurality of measuring computers, each of the second time sources having a different respective accuracy and configured to provide a second time stamp[;].

Claim 53 (Currently Amended): A time synchronization device comprising:

a first measuring computer;

a second measuring computer cooperating with the first measuring computer over a telecommunications network; and

the first measuring computer configured at least to generate first data associated with a send time stamp and to send the first data to the second measuring computer over the telecommunications network;

the second measuring computer configured at least to receive a transmission over the telecommunications network, and to generate second data associated with a receive time stamp;

each of the first measuring computer and the second measuring computer further configured to stop an evaluation of the first and second data when a respective quality of the first data and the second data falls below a predetermined level; and

a plurality of first time sources associated with a first measuring computer, each of the plurality of first time sources having a different respective accuracy and configured to provide a first time stamp;

wherein the first computer is further configured to select a third time source of the plurality of first time sources as a function of an accuracy of the third time source.

Claim 54 (Previously Presented): The time synchronization device as recited in claim 53 further comprising a plurality of second time sources associated with the second measuring computer, each of the second time sources having a different respective accuracy and configured to provide a second time stamp.

Claim 55 (Previously Presented): The time synchronization device as recited in claim 53 wherein the telecommunications network includes at least one of an internet and an intranet.

Claim 56 (Previously Presented): The time synchronization device as recited in claim 53 wherein the first time stamp is usable for performing a measurement method.

